

1. (withdrawn) A method of applying sealant to a non-circular closure comprising:

loading said closure onto a chuck, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;
positioning said chuck so that said closure is in alignment with a stationary sealant dispenser;

rotating said chuck about an axis substantially perpendicular to the plane defined by said periphery and simultaneously translating said chuck in at least one linear axis within said plane such that said periphery of said closure is maintained in alignment with said sealant dispenser;

dispensing said sealant about said periphery while said closure is simultaneously rotating and translating with respect to said sealant dispenser; and
unloading said closure from said chuck.

2. (currently amended) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures comprising:

a sealant dispenser substantially fixedly mounted to said sealant applicator machine;

a chuck adapted to hold said closure in a plane;

a rotational motor directly connected by a drive shaft in rotational communication with to said chuck, said chuck adapted to rotate the chuck along an axis substantially perpendicular to said plane;

a translational mechanism adapted to linearly move said chuck, rotational motor, and drive shaft along at least one axis within said plane; and

a controller adapted to simultaneously rotate and translate said closure with respect to said sealant dispenser to maintain said periphery of said closure in alignment with said sealant dispenser while said sealant dispenser dispenses said sealant.

3. (withdrawn) A non-circular closure having sealant applied thereto which is manufactured by a method comprising:

loading said closure onto a chuck, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

positioning said chuck so that said closure is substantially aligned with a stationary sealant dispenser;

rotating said chuck about an axis substantially perpendicular to said plane and simultaneously translating said chuck in at least one direction in said plane such that said periphery of said closure is maintained in alignment with said sealant dispenser;

dispensing said sealant about said periphery while said closure is simultaneously rotating and translating with respect to said sealant dispenser; and unloading said closure from said chuck.

4. (withdrawn) A non-circular closure having sealant applied thereto which is manufactured by a method comprising:

loading said closure onto a chuck, said chuck being mounted onto a rotating turret, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis substantially normal to said plane and simultaneously moving said chuck in a radial direction on said turret such that said periphery of said closure is maintained in alignment with said sealant dispenser.

5. (withdrawn) A circular closure having sealant applied thereto which is manufactured by a method comprising:

loading the closure onto a chuck, said chuck mounted onto a rotating turret, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis independently of any rotation derived by the rotation of said turret using a fully integrated servomotor.

6. (withdrawn) A circular closure having sealant applied thereto which is manufactured by a method comprising:

loading the closure onto a chuck, said chuck mounted onto a rotating turret, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis independently of any rotation derived by the rotation of said turret using a motor and a remotely located controller.

7. (currently amended) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures comprising:

a sealant dispenser mounted in close proximity to a non-circular closure wherein the periphery of the non-circular closure defines a plane;

rotational means for rotating the non-circular closure along with a directly connected drive shaft defining an axis substantially perpendicular to the plane;

translational means for moving the non-circular closure and drive shaft along at least one axis within said plane; and

controller means for rotating and translating non-circular closure with respect to the sealant dispenser to maintain the periphery of said closure in alignment with the sealant dispenser while the sealant dispenser dispenses the sealant onto the closure.

8. (currently amended) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures comprising:

a sealant dispenser substantially fixedly mounted to a sealant applicator machine;

the non-circular closure mounted in close proximity to the sealant dispenser wherein the periphery of the non-circular closure defines a plane;

a rotational motor directly connected by a drive shaft in rotational communication with the non-circular closure, ~~the non-circular closure adapted~~ to rotate along an axis substantially perpendicular to the plane;

a translational mechanism adapted to linearly move the non-circular closure and drive shaft along at least one axis within the plane; and

a controller adapted to simultaneously rotate and translate the closure with respect to the sealant dispenser to maintain the periphery of the closure in alignment with the sealant dispenser while the sealant dispenser dispenses the sealant.

9. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein linear motion is driven by a cam.

10. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein linear motion is produced by a servomotor.

11. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein a rotational motion is coupled by a spline and gears.

12. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein a rotational motor is mounted below a chuck and coupled with a flexible drive shaft.

13. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein a rotational motor is mounted below a chuck and coupled with a rigid drive shaft.

14. (previously presented) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein a rotational motor is mounted on a moving linear slide.

15. (currently amended) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein both the translational mechanism and rotational motor are ~~fixed~~ fixedly mounted.

16. (currently amended) A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures as recited in claim 8 wherein multiple rotational motors and ~~linear~~ sealant dispensers are mounted on a rotating turret and the linear motion is derived by the rotation of the turret around a cam.